

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0032] with the following:

A1 [0032] In the preferred embodiments, at least one of the higher order eigenvectors is removed from consideration. With the eigenvector corresponding to the higher order eigenvalue removed, the remaining eigenvectors no longer define a complete space, but instead define a subspace. If the correlation matrix C_f was an $M \times M$ matrix, the subspace matrix, N_f , would be an $(M-1) \times M$ matrix if only one eigenvector is removed, would be an $(M-2) \times M$ matrix with two eigenvectors removed, and so on. Thus, the subspace eigenvectors are:

$$\begin{bmatrix} \vec{e}_1 \\ \vec{e}_2 \\ \vdots \\ \vec{e}_{n-r} \end{bmatrix} \quad (7)$$

where r is the number of eigenvectors removed. Removing the higher order eigenvectors corresponding to the signal of interest may be likened to Figures 3B, 3C that have the Z axis component of the three dimensional Cartesian space removed.